WHAT IS CLAIMED IS:

1. A composition for the treatment of proliferative disorders, comprising:

(i) lometrexol or a pharmaceutically acceptable salt thereof; and

(ii) one or more antiproliferative agents or pharmaceutically acceptable salts thereof.

2. A composition in accordance with claim **1**, further comprising folic acid.

3. A composition in accordance with claim **1**, wherein said antiproliferative agent is a member selected from the group consisting of alkylating drugs, antimetabolites, microtubule inhibitors, podophyllotoxins, antibiotics, nitrosoureas, hormone therapies, kinase inhibitors, and antiangiogenic agents.

4. A composition in accordance with claim **1**, wherein said antiproliferative agent is selected from the group consisting of carboplatin, doxorubicin, gemcitabine HCl, temolozolamide, cyclophosphamide, methotrexate, paclitaxel, etoposide, carmustine, cisplatin, tamoxifen, and interferon.

5. A composition in accordance with claim **3**, wherein said kinase inhibitor is selected from the group consisting of tyrphostin AG1478 (4-(3-chloroanilino)-6,7-dimethoxyquinazoline), tyrphostin AG490 (2-cyano-3-(3,4-dihydroxyphenyl)-N-(benzyl)-2-propenamide), indirubin-3'-monoxime, alsterpaullone, genistein, Iressa™ (ZD1839), Gleevec™ (STI-571), SU5416, and Tarceva™ (OSI-774).

6. A method for the treatment of proliferative disorders, comprising administering to a subject in need of such treatment an effective amount of a composition comprising:

(i) lometrexol or a pharmaceutically acceptable salt thereof; and

(ii) one or more antiproliferative agents or pharmaceutically acceptable salts thereof.

7. A method in accordance with claim **6**, said composition further comprising folic acid.

8. A method in accordance with claim **6**, wherein said proliferative disorder is cancer.

9. A method in accordance with claim **8**, wherein said cancer is selected from the group consisting of a solid tumor, a lymphoma, and a leukemia.

10. A method in accordance with claim **9**, wherein said solid tumor is selected from the group consisting of ovarian, breast, head and neck, prostate, glioma, colon, stomach, hepatic, renal, chondrocytoma, small cell lung carcinoma, non-small cell lung carcinoma, and melanoma.

11. A method in accordance with claim **6**, wherein said proliferative disorder is selected from the group consisting of rheumatoid arthritis, psoriasis, and benign prostatic hyperplasia.

12. A method in accordance with claim **8**, wherein said antiproliferative agent is a member selected from the group consisting of alkylating drugs, antimetabolites, microtubule inhibitors, podophyllotoxins, antibiotics, nitrosoureas, hormone therapies, kinase inhibitors, and antiangiogenic agents.

13. A method in accordance with claim **8**, wherein said antiproliferative agent is selected from the group consisting of carboplatin, doxorubicin, gemcitabine HCl, temolozolamide, cyclophosphamide, methotrexate, paclitaxel, etoposide, carmustine, cisplatin, tamoxifen, and interferon.

14. A method in accordance with claim **12**, wherein said kinase inhibitor is selected from the group consisting of tyrphostin AG1478 (4-(3-chloroanilino)-6,7-dimethoxyquinazoline), tyrphostin AG490 (2-cyano-3-(3,4-dihydroxyphenyl)-N-(benzyl)-2-propenamide), indirubin-3'-monoxime, alsterpaullone, genistein, Iressa™ (ZD1839), Gleevec™ (STI-571), SU5416, and Tarceva™ (OSI-774).

15. A method in accordance with claim **6**, wherein said antiproliferative agent is a member selected from the group consisting of alkylating drugs, antimetabolites, microtubule inhibitors, podophyllotoxins, antibiotics, nitrosoureas, hormone therapies, kinase inhibitors, and antiangiogenic agents.

16. A method in accordance with claim **6**, wherein said antiproliferative agent is selected from the group consisting of carboplatin, doxorubicin, gemcitabine HCl, temolozolamide, cyclophosphamide, methotrexate, paclitaxel, etoposide, carmustine, cisplatin, tamoxifen, and interferon.

17. A method in accordance with claim **15**, wherein said kinase inhibitor is selected from the group consisting of tyrphostin AG1478 (4-(3-chloroanilino)-6,7-dimethoxyquinazoline), tyrphostin AG490 (2-cyano-3-(3,4-dihydroxyphenyl)-N-(benzyl)-2-propenamide), indirubin-3'-monoxime, alsterpaullone, genistein, Iressa™ (ZD1839), Gleevec™ (STI-571), SU5416, and Tarceva™ (OSI-774).

18. A method for the treatment of proliferative disorders, comprising administering to a subject in need of such treatment

(i) an effective first amount of lometrexol or a pharmaceutically acceptable salt thereof; and

(ii) an effective second amount of one or more antiproliferative agents or pharmaceutically acceptable salts thereof.

19. A method in accordance with claim **18**, said composition further comprising folic acid.

20. A method in accordance with claim **18**, wherein said amount of lometrexol and said amount of antiproliferative agent are administered simultaneously.

21. A method in accordance with claim **18**, wherein said amount of lometrexol is administered before said amount of antiproliferative agent.

22. A method in accordance with claim **18**, wherein said amount of lometrexol is administered before said amount of antiproliferative agent within a day.

23. A method in accordance with claim **18**, wherein said amount of lometrexol is administered before said amount of antiproliferative agent within a week.

24. A method in accordance with claim **18**, wherein said amount of antiproliferative agent is administered before said amount of lometrexol.

25. A method in accordance with claim **18**, wherein said amount of antiproliferative agent is administered before said amount of lometrexol within a day.

26. A method in accordance with claim **18**, wherein said amount of antiproliferative agent is administered before said amount of lometrexol within a week.

27. A method in accordance with claim **18**, wherein said proliferative disorder is cancer.

28. A method in accordance with claim **27**, wherein said cancer is selected from the group consisting of a solid tumor, a lymphoma, and a leukemia.

29. A method in accordance with claim **28**, wherein said solid tumor is selected from the group consisting of ovarian, breast, head and neck, prostate, glioma, colon, stomach, hepatic, renal, chondrocytoma, small cell lung carcinoma, non-small cell lung carcinoma, and melanoma.

30. A method in accordance with claim **18**, wherein said proliferative disorder is selected from the group consisting of rheumatoid arthritis, psoriasis, and benign prostatic hyperplasia.

31. A method in accordance with claim **27**, wherein said antiproliferative agent is a member selected from the group consisting of alkylating drugs, antimetabolites, microtubule inhibitors, podophyllotoxins, antibiotics, nitrosoureas, hormone therapies, kinase inhibitors, and antiangiogenic agents.

32. A method in accordance with claim **27**, wherein said antiproliferative agent is selected from the group consisting of carboplatin, doxorubicin, gemcitabine HCl, temolozolamide, cyclophosphamide, methotrexate, paclitaxel, etoposide, carmustine, cisplatin, tamoxifen, and interferon.

33. A method in accordance with claim **31**, wherein said kinase inhibitor is selected from the group consisting of tyrphostin AG1478 (4-(3-chloroanilino)-6,7-dimethoxyquinazoline), tyrphostin AG490 (2-cyano-3-(3,4-dihydroxyphenyl)-N-(benzyl)-2-propenamide), indirubin-3'-monoxime, alsterpaullone, genistein, Iressa™ (ZD1839), Gleevec™ (STI-571), SU5416, and Tarceva™ (OSI-774).

34. A method in accordance with claim **18**, wherein said antiproliferative agent is a member selected from the group consisting of alkylating drugs, antimetabolites, microtubule inhibitors, podophyllotoxins, antibiotics, nitrosoureas, hormone therapies, kinase inhibitors, and antiangiogenic agents.

35. A method in accordance with claim **18**, wherein said antiproliferative agent is selected from the group consisting of carboplatin, doxorubicin, gemcitabine HCl, temolozolamide, cyclophosphamide, methotrexate, paclitaxel, etoposide, carmustine, cisplatin, tamoxifen, and interferon.

36. A method in accordance with claim **34**, wherein said kinase inhibitor is selected from the group consisting of tyrphostin AG1478 (4-(3-chloroanilino)-6,7-dimethoxyquinazoline), tyrphostin AG490 (2-cyano-3-(3,4-dihydroxyphenyl)-N-(benzyl)-2-propenamide), indirubin-3'-monoxime, alsterpaullone, genistein, Iressa™ (ZD1839), Gleevec™ (STI-571), SU5416, and Tarceva™ (OSI-774).